

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

**WSOU INVESTMENTS, LLC d/b/a,
BRAZOS LICENSING AND
DEVELOPMENT**

Plaintiff,

V.

GOOGLE LLC,

Defendant.

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Civil Case No. 6:20-cv-575-ADA

JURY TRIAL DEMANDED

**DEFENDANT GOOGLE LLC'S MOTION FOR SUMMARY JUDGMENT OF PATENT
INELIGIBILITY UNDER 35 U.S.C. § 101**

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1	U.S. Patent No. 8,559,928
2	June 29, 2005 Applicant Brief Before Board of Patent Appeals and Interferences

TABLE OF ABBREVIATIONS

Abbreviation	Description
WSOU	Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development
Google	Defendant Google LLC
'928 patent	U.S. Patent No. 8,559,928
POSITA	Person Of Ordinary Skill In The Art
§ 101	35 U.S.C. § 101

* *Emphasis added unless indicated otherwise.*

I. INTRODUCTION AND SUMMARY OF ARGUMENT

WSOU asserts 12 claims of a single patent, U.S. Patent No. 8,559,928 (Ex. 1), in this case. The asserted claims are the poster child for patent-ineligible subject matter. They are directed to an age-old abstract idea—using a tree structure to organize information—implemented on a standard mobile device.

The fundamental cornerstone of patent law is that “[a]n idea itself is not patentable.” *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). To that end, Supreme Court and Federal Circuit precedent is unequivocal that ways of organizing and presenting information are, by definition, abstract ideas that are patent ineligible under Section 101. *See, e.g., Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327 (Fed. Cir. 2017) (invalidating claims directed to “collect[ing], classify[ing], or otherwise filter[ing] data”); *Elec. Power Grp. LLC v. Alston S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (invalidating claims directed to collecting, analyzing, and displaying information). In particular, the idea of hierarchical organization “is a building block, a basic conceptual framework for organizing information.” *In re Morinville*, 767 F. App’x 964, 966 (Fed. Cir. 2019) (rejecting claims directed to a hierarchical operational structure).

Here, there is no dispute that using a tree structure to organize information is a well-known idea that has long been implemented with pen and paper. Indeed, during prosecution, the applicants made clear that it was “well understood that a ‘tree structure’ is a way of representing the ‘hierarchical’ nature of a ‘structure’ in a graphical form.” (Ex. 2 at 6.) The applicants even cited Wikipedia to show that tree structures have been used for centuries. (*Id.*) As such, the applicants admitted that using tree structures to organize information is the quintessential abstract idea. And the ’928 patent’s application of that idea to contact information stored on a mobile device cannot save the claims from patent ineligibility. “The Supreme Court and [Federal Circuit] have repeatedly made clear that merely limiting the field of use of the abstract

idea to a particular existing technological environment does not render the claims any less abstract.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016). So too in this case.

The asserted claims also lack any inventive concept. The claims do not purport to improve the functioning of a mobile device. Rather, the claims use generic components—such as a “memory,” “display,” “processing unit,” and “user interface”—in a conventional way to implement the abstract idea of organizing information in a tree structure. The ’928 patent specification confirms that such components are “commonly used” in mobile devices. (Ex. 1 at 3:27-40.) And the entirety of the ’928 patent demonstrates that “[n]othing in the claims, understood in light of [the] specification, requires anything other than off-the-shelf, conventional computer, network, and display technology” for implementing this abstract idea. *Elec. Power*, 830 F.3d at 1355. Presented with similar circumstances, courts uniformly hold the claims ineligible under Section 101.

II. LEGAL STANDARDS

A. Summary Judgment

Summary judgment is appropriate if the Court determines that “there is no genuine issue as to any material fact and that the moving parties are entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). The court properly grants summary judgment if no reasonable jury could return a verdict for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

B. Subject Matter Eligibility Under 35 U.S.C. § 101

Whether claims cover patent-ineligible subject matter is a question of law. *CyberSource v. Retail Decisions*, 654 F.3d 1366, 1369 (Fed. Cir. 2011). Courts apply a two-step process to determine whether claims cover a patent-ineligible “abstract idea.” *Alice Corp. Pty. v. CLS Bank*

Int'l, 573 U.S. 208, 217-18 (2014). First, the court determines whether the claim's "character as a whole is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015). In doing so, the court looks at the "focus" or "basic thrust" of the claim to determine whether it is directed to an abstract idea. *Elec. Power*, 830 F.3d at 1353. Second, the court proceeds to "search for an 'inventive concept'—*i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.'" *Alice*, 573 U.S. at 217-18. The inventive concept must be "significantly more than" the abstract idea itself, *id.*, and it must be more than "well-understood, routine, conventional activity." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 73 (2012).

III. PROCEDURAL BACKGROUND

This is one of thirteen cases that WSOU currently has pending against Google in this Court. On June 2, 2021, the Court issued a Claim Construction Order construing the terms "contact information" and "tree structure" to have their plain and ordinary meanings. (Dkt. 49 at 4.) The parties are now four months into fact discovery. Google has served its invalidity contentions and propounded an interrogatory seeking the complete basis for WSOU's position as to why the asserted claims are not patent-ineligible under Section 101. WSOU has provided no substantive response. Nor is there any dispute about the contents of the record relevant to this motion—the patent and its prosecution history.

IV. ARGUMENT

A. *Alice* Step One: The Asserted Claims Are Directed To The Abstract Idea Of Organizing Contact Information In A Tree Structure

For purposes of this motion, claim 9 is representative. *See infra* Section IV.C (specifically addressing each asserted claim). Claim 9 recites:

9. A method for storing contact information in a mobile communication apparatus comprising:

assigning a plurality of logical levels of a tree structure to respective groups of said contact information; and

storing contact information in a logical level of said tree structure being related to said groups of contact information,

wherein contact information at a top logical level of a respective group includes contact information that is common to all lower level contact information belonging to the respective group and wherein an item on the top logical level comprises links to items on a lower logical level which comprises links to items on a further lower logical level.

(Ex. 1 at claim 9.)

1. The Claims Cover The Well-Known Practice Of Organizing Information In A Tree Structure

The asserted claims are directed to a textbook example of an abstract idea—namely, the longstanding practice of using a tree structure to organize information. Looking at the “focus” and “character” of the claims as a whole and as individual limitations, *Elec. Power*, 830 F.3d at 1353, demonstrates the application of an abstract idea. As explained below, the claims are directed to nothing more than the abstract concept of a tree structure for organizing information. Such “result-focused, functional character of claim language has been a frequent feature of claims held ineligible under § 101.” *Id.* at 1356. This case is no different.

In representative claim 9, the preamble’s recitation of “contact information” and “a mobile communication device” does not make the claims any less abstract. This Court determined that “contact information” did not require construction, and the concept of organizing “contact information” in a tree structure is just as abstract as organizing any other type of “information” in that structure. As “many cases make clear, even if a process of collecting and analyzing information *is limited to particular content or a particular source*, that limitation does not make the collection and analysis [anything] other than abstract.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1168 (Fed. Cir. 2018); *see Elec. Power*, 830 F.3d at 1353 (“[C]ollecting

information, *including when limited to particular content (which does not change its character as information)*, is within the realm of abstract ideas.”). As for a “mobile communication device”: “[T]he prohibition against patenting abstract ideas *cannot be circumvented* by attempting to limit the use of the idea to a particular technological environment.” *Alice*, 573 U.S. at 222.

Each of the limitations of representative claim 9 are directed to the abstract idea of using a tree structure to organize contact information. The first limitation relates to “assigning” “respective groups” of “contact information” into different “logical levels,” which is just a way of describing the abstract concept of organizing any information into a tree-structure. *See Intell. Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) (holding claims reciting steps of “collecting, displaying, and manipulating data” are directed to abstract ideas). The second limitation is no less abstract, as it merely recites storage of information, specifically the information “assigned” in the first limitation. *See In re TLI Commc’ns LLC Pat. Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (“classifying and storing digital images in an organized matter” is an “abstract idea” that “fail[s] to add an inventive concept sufficient to confer patent eligibility”).

Likewise, the third limitation consists of two wherein clauses, both directed to the overall structure of the tree and thus directed to an abstract idea. The first clause concerns the concept of inheritance—the idea that the information in the top level will carry down to the levels below. This relates to a basic, and abstract, concept of inheriting information through a tree structure. The age-old concept of organizing relatives into a family tree confirms as much. Similarly, the second clause is directed to links between higher and lower levels of the tree structure. This too relates to nothing more than an abstract idea because implementing a tree-structure organization necessarily requires that a top level share some logical or common connection to a lower level.

It was—and is—a well-known requirement that information in a tree structure be organized using connected “roots” or “nodes.” In fact, the applicants distinguished prior art as failing to disclose a tree structure because there was “no particular ordering” with “roots” or “nodes.”
(Ex. 2 at 6.)

Nor does the third limitation’s reference to “links” render the claims any less abstract. It merely recites the organizational relation between top-level nodes and lower-level nodes—namely, that one node is connected to the other. As the Federal Circuit aptly explained in similar circumstances:

The focus of the claims, as reflected in what is quoted above, is on selecting certain information, analyzing it using mathematical techniques, and reporting or displaying the results of the analysis. *That is all abstract.*

SAP, 898 F.3d at 1167. The same reasoning yields the same result in this case.

Analyzing the combination of claim limitations in totality also demonstrates that the claims are directed to an abstract idea. As a whole, representative claim 9 relates only to the storing of information in a tree structure with basic requirements about the creation and organization of the tree. There is nothing about the combination of limitations that alters this analysis. At bottom, a tree structure is an abstract idea, identifying information is an abstract idea, and storage is an abstract idea. Combining them changes nothing. As explained in Section IV.A.4, the asserted claims closely resemble claims previously invalidated by the Federal Circuit.

2. The Specification Confirms The Purported Invention Is An Abstract Idea

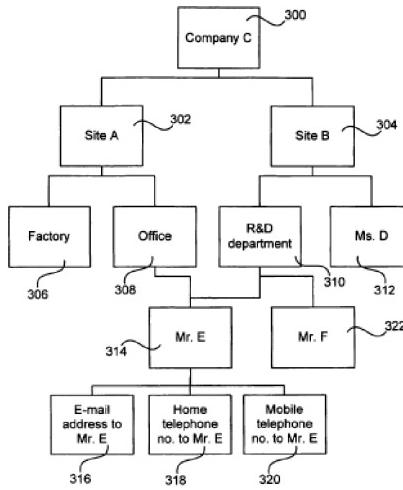
The ’928 patent specification confirms that the abstract concept of using a tree structure is the primary aspect of the alleged invention and that any improvement to the tree structure is not an improvement in the functioning of a computer. In the “Technical Field” section, the

patent makes explicit that “[t]his invention particularly relates to a tree structure of contact information.” (Ex. 1 at 1:9-10.) The patent states that it addresses a problem with organizing information, noting that “[n]ormally, contact information [was] structured as a simple list.” (*Id.* at 1:17-18.) In the “Summary of Invention” section, the patent announces that the “objective of the invention” is “providing contact information . . . in a way that is intuitive to a user” by “structuring” that information “according to relations.” (*Id.* at 1:33-35.) The patent then notes that an “advantage of this is that a user will experience the contact information according to her view of relation between parts of the information, which implies an intuitive structure and an improvement for the user.” (*Id.* at 1:62-65.) This purported solution is nothing more than the abstract idea of organization in a tree structure. And the specification makes no claim that the invention improves the operation of any device from a technical perspective. *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 768 (Fed. Cir. 2019) (“[T]he specification never suggests that the charging station itself is improved from a technical perspective, or that it would operate differently than it otherwise could. Nor does the specification suggest that the invention involved overcoming some sort of technical difficulty in adding networking capability to the charging stations.”).

Even if the patent provided an improvement upon the concept of a tree structure, that would still not confer patent eligibility. The Federal Circuit repeatedly holds “that merely reciting an abstract idea by itself in a claim—even if the idea is novel and non-obvious—is not enough to save it from ineligibility.” *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1169 (Fed. Cir. 2019); *see Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] claim for a new abstract idea is still an abstract idea.”).

Figure 3 exemplifies implementing the abstract idea for arranging contact information in

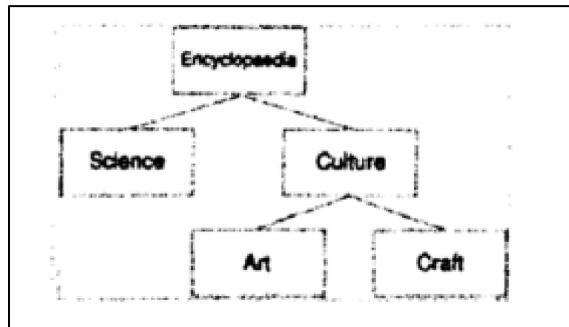
a tree structure.



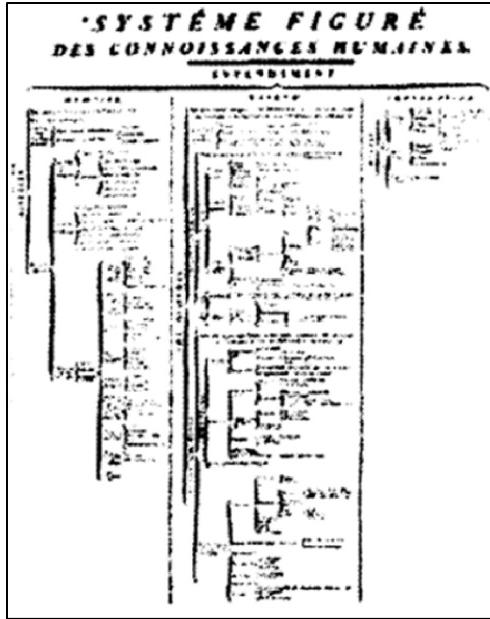
The top logical level 300 is a company that can comprise “contact information common for the entire company, such as a switch board telephone number, address to head office, [or] web address.” (Ex. 1 at 3:59-65.) The information at this top level includes links to the lower levels, which can be “different sites of the company” such as site A (302) and site B (304). (*Id.* at 3:67-4:4.) Site A may be comprised of a factory or an administrative office at that site, and site B may be comprised of the R&D department or information for the contact person at that site (Ms. D). (*Id.* at 4:4-12.) This embodiment illustrates the application of an abstract idea which has long been performed by pen and paper via corporate organizational charts and tabbed cross-referenced company directories. As such, “there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.” *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016). The Federal Circuit consistently “treat[s] analyzing information by steps people go through in their minds . . . , without more, as essentially mental processes within the abstract-idea category.” *FairWarning IP, LC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016).

3. The Applicants Admitted The Claims Are Directed To A Long-Standing Abstract Idea

The applicants' statements during prosecution cement the fact that the claims are directed to a well-known abstract idea. When distinguishing prior art during prosecution, the applicants stated that it was "*well understood* that a '*tree structure*' is a way of representing the '*hierarchical*' nature of a '*structure*' in a graphical form." (Ex. 2 at 6.) Indeed, the applicants cited a Wikipedia article to support their position that a tree structure to organize information was well known. (*Id.*) The article described a "*tree structure*" as a "*way of representing the hierarchical nature of a structure in a graphical form.*" (*Id.* at 19.) The article explained the name "*tree structure*" originates from the graphical organization looking like an "*upside down*" tree, with the "*root at the top and the leaves at the bottom.*" (*Id.*) The article illustrated a tree structure in the context of encyclopedias, where subjects may be organized by common logical roots which are then further divided by "*child nodes.*" (*Id.*)



The article further demonstrated that humans have used a tree structure to organize information with pen and paper for centuries. Indeed, the article provided a picture from the "*original Encyclopédie*," noting that it "*actually used a tree diagram to show which way its subjects were ordered.*" (*Id.*)



The article also provided numerous age-old “pen-and-paper” examples using a tree structure to organize information, including: (1) organizational management—hierarchical organizational structures (precisely what the asserted claims cover); (2) information management—the Dewey Decimal System; (3) business—pyramid selling schemes; and (4) project management—work breakdown structure. (*Id.* at 20.)

The prosecution history decisively confirms that a tree-structure organization is a longstanding and routine concept implemented in numerous contexts. Such “fundamental practices long prevalent are abstract ideas.” *Symantec*, 838 F.3d at 1314. Indeed, the “Supreme Court and [Federal Circuit] have held that a wide variety of well-known and other activities constitute abstract ideas.” *Id.* & n.5 (collecting cases). Here, contact information is merely an example of a type of information that can be organized into a tree structure.

In sum: The asserted claims are directed to the abstract concept of organizing contact information in a tree structure. Section 101 protects precisely against such claims because “[c]laiming the abstract idea of organizing information into a hierarchy would preempt any other inventor from creating a computer-based method for categorizing and organizing information by

classification, no matter how the inventor achieved this result.” *Hewlett Packard Co. v. ServiceNow, Inc.*, 2015 WL 1133244, at *7 (N.D. Cal. Mar. 10, 2015); *see EMG Tech., LLC v. Etsy, Inc.*, 2017 WL 780648, at *1-2 (E.D. Tex. Mar. 1, 2017) (holding claims directed to the displaying of information in a “hierarchical tree format” on a computer screen covered an abstract idea).

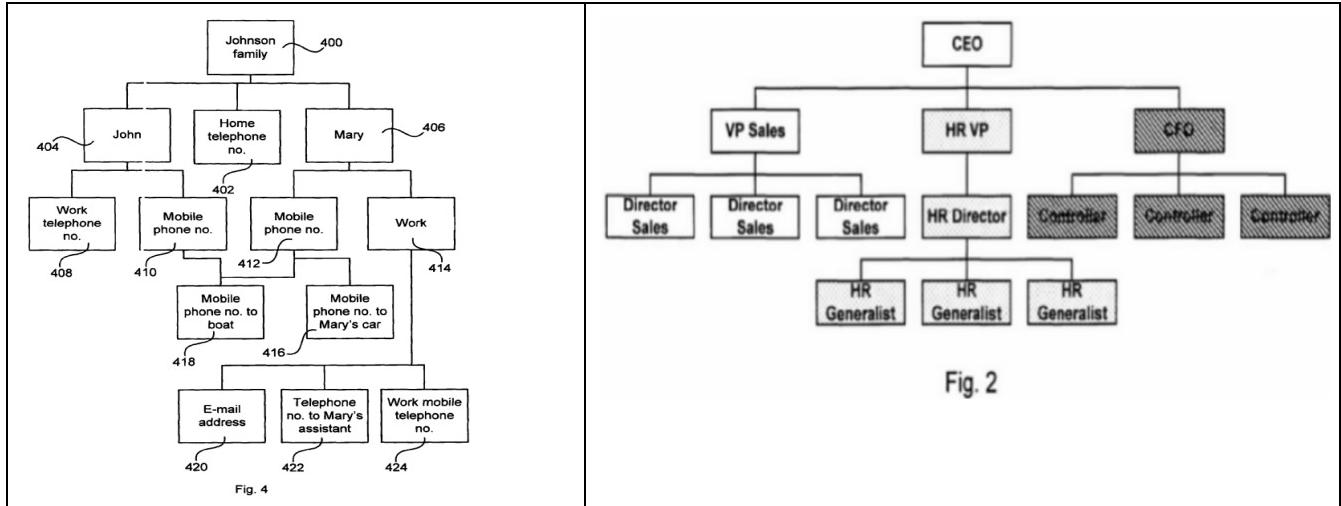
4. The Asserted Claims Closely Resemble Claims That Courts Have Consistently Held Are Directed To Abstract Ideas

As explained above, the asserted claims epitomize a patent-ineligible abstract idea under Section 101. Not surprisingly, the Federal Circuit has repeatedly held that claims reciting similar steps of storing and organizing data are abstract and patent ineligible. *See Elec. Power*, 830 F.3d at 1353 (invalidating claims directed to “collecting information, analyzing it, and displaying certain results of the collection and analysis”); *TLI Commc’ns*, 823 F.3d at 613 (invalidating claims directed to classifying and storing digital information in an organized manner); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333-36 (Fed. Cir. 2015) (invalidating claims for using organizational and product group hierarchies to determine a price); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1350-51 (Fed. Cir. 2014) (invalidating claims directed to organizing information through mathematical correlations).

First, the Federal Circuit in *In re Morinville* invalidated claims closely analogous to those here. The claims in *Morinville* were directed to “dynamically generating a hierarchical functional structure from a hierarchical operational structure.” 767 F. App’x at 966. The court explained “that *using organization and group hierarchies in determinations is an abstract idea* that has no particular concrete or tangible form or application.” *Id.* at 968. The court reasoned that hierarchical organization “is a building block, *a basic conceptual framework for organizing information.*” *Id.*

The asserted claims of the '928 patent are even more abstract than those in *Morinville*.

The '928 patent	<i>In re Morinville: Claims & Figures</i>
<p>9. A method for storing contact information in a mobile communication apparatus comprising:</p> <p>(1) assigning a plurality of logical levels of a tree structure to respective groups of said contact information; and</p> <p>(2) storing contact information in a logical level of said tree structure being related to said groups of contact information,</p> <p>(3a) wherein contact information at a top logical level of a respective group includes contact information that is common to all lower level contact information belonging to the respective group and (3b) wherein an item on the top logical level comprises links to items on a lower logical level which comprises links to items on a further lower logical level.</p>	<p>1. A method implemented in a computer for dynamically generating a hierarchical functional structure from a hierarchical operational structure, comprising the steps:</p> <p>[(a)] providing a hierarchical operational structure of unique positions within an organization;</p> <p>[(b)] associating one of a plurality of roles with each of the positions, wherein each of the roles has a corresponding major function, and wherein at least a subset of the roles is non-unique;</p> <p>[(c)] identifying a first one of the positions;</p> <p>[(d)] identifying positions in the hierarchical operational structure that are subordinate to the first one of the positions and that have roles which have at least one functional level in common with the role of the first one of the positions; and</p> <p>[(e)] generating a hierarchical functional structure of the identified positions; and</p> <p>[(f)] controlling user access to business processes based on the hierarchical functional structure;</p> <p>[(g)] wherein each of the steps is automatically implemented in the computer.</p>
<p>Fig. 3</p>	<p>Fig. 1</p>



As shown above, both the '928 patent and the claims and figures in *Morinville* describe organizing information in grouped hierarchical structures. They both use links between the information on different levels. And both use a hierarchy wherein the top logical level in a group has common information among the lower logical groups. Notably, the claims in *Morinville* required more than the claims here because they recited not only organizing information into a hierarchical structure (Element 1[a], Fig. 1), but further generating a different hierarchical structure based on function (Element 1[e], Fig. 2).

The Federal Circuit explained that the *Morinville* claims are “directed to the general concept of reorganizing an organization in conformity with function” that fails *Alice* step one. *Id.* at 969. The same reasoning and outcome applies here. If organizing information in one tree structure and reorganizing it into another is an abstract concept, it follows that organizing information into a tree structure in the first place must also be abstract.

Second, in addition to *Morinville*, the Federal Circuit has repeatedly rejected as patent ineligible similar claims directed to organizing data in a hierarchical manner on computer systems. *See, e.g., Erie Indem.,* 850 F.3d at 1327; *Versata*, 793 F.3d at 1311-1313, 1333-34; *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1286 (Fed. Cir. 2018). In *Erie Indemnity*, the

court observed that using “hierarchical structure[s]” for “organizing and accessing records” has “existed well before the advent of computers and the Internet.” 850 F.3d at 1327. Accordingly, the court held that “the claimed creation of an index used to search and retrieve information stored in a database is [] abstract” because it fell squarely in line with other “abstract concepts that merely collect, classify, or otherwise filter data.” *Id.* at 1327-28 (collecting cases). Similarly, in *Versata*, the court invalidated claims directed to organizing and arranging information into product-group “hierarchies” because they covered abstract ideas that were “conventional and well known” in the industry. 793 F.3d at 1311-1313, 1333-34. And in *BSG*, the Federal Circuit held claims drawn to “providing [a] database with a structure having a plurality of item classifications, parameters, and values” as patent ineligible. 899 F.3d at 1284-86.

Third, in *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1234 (Fed. Cir. 2016), the Federal Circuit addressed claims that, in part, recited menus with categories consisting of menu items stored on a device and displayable in a window with a “graphical user interface in a hierarchical tree format.” *Id.* at 1241. The court concluded that such claims were directed to an abstract idea. *Id.* Rejecting the argument that menus including the graphical interface in a hierarchical tree format were not abstract, the Federal Circuit explained that the challenged claims did not cover “a particular way of programming or designing the software to create menus that [had specific] features, but instead [they] merely claim[ed] the resulting systems.” *Id.* In effect, the claims were directed to the ability to generate menus having a hierarchical tree format display, which was insufficient to pass muster under step one. *Id.* Regarding step two, the court held that the claims did nothing more than “adding conventional computer components to well-known business practices.” *Id.* at 1242.

The reasoning and logic in the foregoing Federal Circuit cases compel the same conclusion here. Just as the claims in those cases arranged and organized information through hierarchical structures, the asserted claims here are directed to organizing contact information in a tree-structure hierarchy. Just as the claims in *Erie Indemnity* and *Versata* covered a pen-and-paper classification that were well known, the same is true here. As evidenced by the applicants' submission of documents during prosecution, organizing information in a tree structure has been done since at least the 18th century. (Ex. 2 at 6.)

Additionally, consistent with this Federal Circuit precedent, numerous district courts presented with similar claims directed to storing and organizing information in a hierarchical format have held those claims ineligible. *See, e.g., EMG Tech.*, 2017 WL 780648, at *1-2 (holding that claims for displaying information in a “hierarchical tree format” were directed to an abstract idea); *Hewlett Packard*, 2015 WL 1133244, at *7-9 (holding that claims reciting, accessing and using information in a hierarchical repository were directed to an abstract idea); *TS Pats. LLC v. Yahoo! Inc.*, 279 F. Supp. 3d 968, 985 (N.D. Cal. 2017), *aff’d*, 731 F. App’x 978 (Fed. Cir. 2018) (invalidating claim directed to organizing and viewing data on a network in a reducible hierarchy). The same is true here.

B. *Alice* Step Two: The Asserted Claims Do Not Disclose Any “Inventive Concept” Beyond The Abstract Idea

Turning to *Alice*’s second step, the asserted claims of the ’928 patent do not contain an “inventive concept” that makes them patent eligible. *Alice*, 570 U.S. at 221. The Supreme Court and Federal Circuit stress that “generic computer implementation” is insufficient to transform an abstract idea into a patent-eligible invention. *Alice*, 573 U.S. at 212; *see BSG Tech*, 899 F.3d at 1290-91 (applying “an abstract idea using conventional and well-understood techniques” does not transform it into a patent eligible application of an abstract idea).

Here, the asserted claims take the abstract idea of organizing contact information in a tree structure and implement it using a generic mobile device. Representative claim 9 only recites standard functions of generic computers, namely, “assigning” and “storing” information. *Erie Indemn.*, 850 F.3d at 1329 (holding no inventive concept in “routine computer functions, such as the sending and receiving of information to execute the database search”). These steps invoke purely functional language directed to the abstract idea, *i.e.*, organizing, storing and accessing contact information in a tree structure. *See, e.g., Two-Way Media Ltd. v. Comcast Cable Commc’ns*, LLC, 874 F.3d 1329, 1337 (Fed. Cir. 2017) (holding that use of results-based functional language failed to “sufficiently describe how to achieve these results in a non-abstract way”); *Morinville*, 767 F. App’x at 970 (holding claims using functional language such as “providing a hierarchical operational structure,” “associating,” “identifying,” and “generating” in a computer-based invention fail the Section 101 test).

Even when the claims recite some physical components—such as a “memory,” a “display,” or a “processing unit”—these amount to nothing more than basic and standard components of a generic “mobile communication apparatus.” The Federal Circuit uniformly holds that claims reciting generic components such as “server,” “mobile device,” “processor,” or “memory” fail step two because they did not transform the invention into something other than the abstract idea. *Free Stream Media Corp. v. Alphonso Inc.*, 996 F.3d 1355, 1358-59, 1366 (Fed. Cir. 2021); *see also Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384-85 (Fed. Cir. 2019) (claims focused on displaying information more efficiently were directed to an abstract idea); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1338 (Fed. Cir. 2018) (same). Generic hardware limitations that merely serve as “a conduit for the abstract idea” cannot provide an inventive concept. *In re TLI Commc’ns*, 823 F.3d at 612. As here,

“invocation of already-available computers that are not themselves plausibly asserted to be an advance, for use in carrying out improved mathematical calculations, amounts to a recitation of what is well-understood, routine, and conventional.” *SAP*, 898 F.3d at 1170. Accordingly, the asserted claims fit into the familiar class of claims that do not focus on an “improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.”

Elec. Power, 830 F.3d at 1354.

The specification confirms that these components are generic. For example, Figure 1 shows the claimed “mobile communication apparatus” and explains that it is comprised of a “processor,” a “transceiver,” a “user interface” that “can comprise one or more displays,” and a “memory”—each depicted as a black box. (Ex. 1 at 3:27-32.)

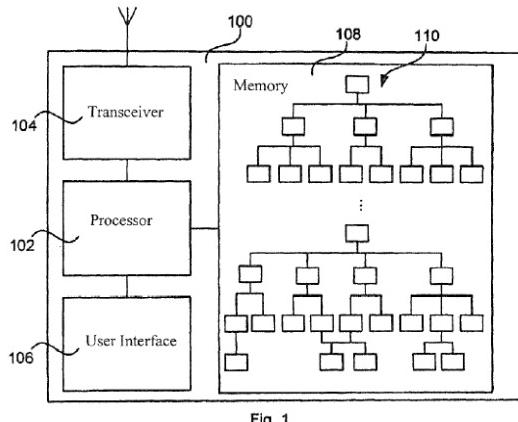


Fig. 1

The specification recognizes such components are “*commonly used* [in] mobile communication apparatuses.” (*Id.* at 3:29-40.) As such, the claims are drafted “at a high level of generality and merely invoke[] well-understood, routine, conventional components to apply the abstract idea.” *Yu v. Apple Inc.*, 2021 WL 2385520, at *4 (Fed. Cir. June 11, 2021) (rejecting argument that claimed hardware configuration was vital to performing the invention because “the generic hardware limitations … merely serve[d] as conduit for the abstract idea”). The inclusion of any of the foregoing components cannot constitute an “inventive concept” as a matter of law.

Moreover, there is no suggestion in the claims or specification that the generic computer components and functions are implemented in anything but routine and conventional ways. None of the asserted claims are “directed to an improvement in computer functionality”—as evident by the fact that the specification touts the way the contact information is organized as the improvement (Ex. 1 at 1:24-36 (“an objective is to provide contact information storage and/or access *in a way that is intuitive to the user*”), not device functionality. Rather, the claims recite “a mere use of a computer as a tool” to implement the abstract idea of tree-structure organization “using conventional components and functions generic to the technology.” *Free Stream*, 996 F.3d at 1363, 1365-66. Even if, for the sake of the argument, any of the claimed components were deemed non-generic (and they are not), “claims are not saved from abstraction merely because they recite components more specific than a generic computer.” *BSG Tech LLC*, 899 F.3d at 1286; *ChargePoint, Inc.* 920 F.3d at 773 (“[A]dding novel or non-routine components is not necessarily enough to survive a § 101 challenge.”). The claims still must contain an inventive concept improving the technology or performance of those components, or using them in an unconventional way, which as described above, the asserted claims do not.

Without any inventive concept to transform the claims directed to the abstract idea into something significantly more, the asserted claims of the ’928 patents are ineligible under § 101.

C. All Asserted Claims Fail The *Alice* Test

The foregoing two-step analysis is dispositive of all the asserted claims because they are all directed to the same abstract idea of organizing contact information into a tree structure, and none adds an inventive concept. When performing a Section 101 analysis, courts routinely analyze a “representative claim” when the asserted claims are substantially similar. *Two-Way Media*, 874 F.3d at 1337 (Fed. Cir. 2017); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 712 (Fed. Cir. 2014) (“As the other claims of the patent are drawn to a similar process … [they] need

not be considered further.”). An extended claim-by-claim analysis is unnecessary when multiple claims are “substantially similar and linked to the same abstract idea.” *Content Extraction and Transmission LLC v. Wells Fargo Nat'l. Assn.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014); *see Alice*, 134 S.Ct. at 224 (finding a single method claim “representative” of all claims across four patents). The analysis of claim 9 demonstrates that all other claims are invalid. Nevertheless, the reasons why each additional asserted claim, like claim 9, fails the *Alice* two-step test are as follows:

Independent claim 1 ('928 patent at 6:23-33): Claim 1 is the apparatus equivalent to the method of claim 9. It recites a “mobile communication apparatus comprising a memory configured to hold contact information, wherein items of contact information are stored” according to the storing method of claim 9—*i.e.*, in groups, with “each group having a respective tree structure comprising a plurality of logical levels.” Claim 1 further includes wherein clauses identical to those in the third limitation of claim 9. Claim 1 is not different in substance than Claim 9, and is directed to the same abstract idea. The Supreme Court’s instruction on this point is direct: “Put another way, the system claims are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea.” *Alice*, 573 U.S. at 226. As explained in Section IV.B, reciting generic components such as a “memory” does not confer patent eligibility. *Free Stream*, 996 F.3d at 1358-59;

Dependent claim 2 ('928 patent at 6:34-37): This claim depends from claim 1, and recites that “logical levels are defined by links between at least a higher level item and at least a lower level item.” This describes the same abstract idea of organizing information set forth in claim 1, and it does not add an inventive concept.

Independent claim 15 ('928 patent at 7:29-41): Like claim 9, claim 15 is a method claim directed to the same abstract idea of organizing contact information. The only difference is that claim 15 is a method of “accessing” the contact information stored in a mobile device by “navigating to a logical level of a tree structure.” Reciting generic computer functions, such as “accessing” and “navigating,” does not constitute an inventive concept. *Erie Indemn.*, 850 F.3d at 1329.

Dependent claims 8 ('928 patent at 6:58-63), 13 ('928 patent at 5:19-24), and 19 ('928 patent at 6:6-11): Claims 8, 13, and 19 depend from claims 1, 9, and 15, respectively, but are otherwise identical. They recite that “said contact information comprises home telephone number, work telephone number, mobile telephone number, private e-mail address, work e-mail address, home address, work address, image, text, symbol, sound, red-letter day, or web address, or any combination thereof.” These claims merely identify different types of contact information that can be organized in a tree structure; they are likewise abstract and do not add an inventive concept. *See SAP*, 898 F.3d at 1168; *Elec. Power*, 830 F.3d at 1353.

Dependent claims 14 ('928 patent at 7:26-29) and 20 ('928 patent at 12-15): Claims 14 and 20 depend from claims 9 and 15, respectively, but are otherwise identical. They add the requirement that “said logical levels are associated to groups, families, companies, departments, teams, clubs, or personal relations, or any combination thereof.” Like claims 8, 13, and 19, these claims merely identify groupings of contact information that can be organized in a tree structure. They are abstract and do not add an inventive concept.

Dependent claims 21 ('928 patent at 8:16-19) and 22 ('928 patent at 8:20-23): Claim 21 is directed to “a non-transitory computer readable medium comprising: computer readable program code for causing a computer to perform the method in claim 9.” Claim 22 is

substantively identical to claim 15, but recites code for performance of the method in claim 15. Thus, like claims 9 and 15, both are directed to the same abstract concept of organizing contact information in a tree structure. The Supreme Court squarely rejected analogous claims reciting “computer-readable medium containing program code for performing” an abstract method in *Alice*. 573 U.S. at 226-227.

Independent claim 23 ('928 patent at 8:24-35): Claim 23 recites, at most, generic components configured to implement the same idea as representative claim 9. Specifically, it identifies a “user interface comprising a display; and a processing unit configured to present, on the display, items regarding contact information where the items are arranged” in the tree structure described in claim 9. As set forth in Section IV.B, above, the recitation of generic components such as those is insufficient to pass step two of *Alice*. *Free Stream*, 996 F.3d at 1358-59; see *Alice*, 573 U.S. at 226-227; *EMG Tech.*, 2017 WL 780648, at *4 (holding that the claims did not provide an inventive concept under step two because the recited components were conventional, generic, and “d[id] not meaningfully limit the equipment that may be used to actualize the abstract hierarchical tree of the claims”).

V. CONCLUSION

For the foregoing reasons, Google respectfully requests that this Court grant its motion for summary judgment¹ and hold that the asserted claims of the '928 patent are invalid under 35 U.S.C. § 101.

¹ Pursuant to the Court’s guidance, Google understands that, because this motion for summary judgment is made under Section 101, the pages used for this motion do not count against the page limits otherwise set out for summary judgment motions. Google relies upon the Patent FAQ - Pre-Trial, available at <https://www.txwd.uscourts.gov/for-attorneys/judge-albright-courtroom-faq/> (“Q. If Defendant files a 101 motion, do those pages count against the page limits for summary judgment motions? A. No.”).

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 30, 2021, I electronically filed this document with the Clerk of Court via the Court's CM/ECF system which will send notification of such filing to all counsel of record, all of whom have consented to electronic service in this action.

/s/ Michael E. Jones